REMARKS

Claims 1-11, 13, 17, 21-34, 38-43, 47-55, 57-60, 62-65 and 71-81 have been amended. Claims 12, 14-16, 35-37, 44-46, 56, 61 and 66-70 have been cancelled. Accordingly, Claims 1-11, 13, 17, 21-34, 38-43, 47-55, 57-60, 62-65 and 71-81 are pending in the application. The reconsideration of the application is respectfully requested.

In the February 28, 2003, Final Office Action, the Examiner objects to the numbering of the claims. Pursuant to the Examiner's objection, misnumbered Claims 1-82 have been renumbered 1-81. For the sake of clarity, Claims 1-30 remains as originally numbered, and Claims 32-82 have been renumbered to be Claims 31-81. Thus, cancelled Claim 47 from Amendment A is renumbered as cancelled Claim 46 in this Amendment B.

Claims 1-81 stand rejected under 35 U.S.C. Section 103(a) as unpatentable over Shutzer in view of Johnson et al.

The present invention provides an end-to-end electronic bill presentment and payment (EBPP) system that communicates in lingua franca to enable any and all billers to interface with each other to cooperatively present and accept payment of bills using a rules application process to generate a translator that parses the biller's data stream into a common document model tree. In the common document model tree, the data and their attributes are mapped into nodes that fit the common document model for storage in the database. Because of the generic

and universal nature in which the billing data and its attributes are stored, the database can be coupled to presentment processors to transform the stored data into whatever desired form and format to support bill presentment wherever and whenever desired (Applicants' Specification, page 9, lines 10-19).

The use of the common format document model and the universality of its structure allows the billers using the present invention to maintain control, from a billing console functionality, over their billing data and how it is presented on any desired platform using any desired applications, formats and protocols (Applicants' Specification, page 10, lines 14-16). Applicants' common model document processing functionality provides for a generic conversion process that is not confined to a particular industry, biller, or type of customer. Consequently, these features allow billers to, among other things, leverage and build brand, in addition to providing billers with the ability to control the way the bill looks, what is contained in the bill and why, and how and according to what terms the bill can be paid (Applicants' Specification, page 11, lines 12-15).

With respect to independent Claims 1, 21, 38, 40, 47, 49, 51, 62 and 71, the Examiner concedes that Schutzer does not teach the parsing/extracting functionality and cites the *abstract, fig. 1, column 2, lines 1-30, and column 4, lines 3-16* of Johnson et al. to cure this deficiency of Shutzer. The Examiner is entirely correct that Schutzer failed to teach the parsing/extracting functionality of Claims 1, 21, 38, 40, 47, 49, 51, 62 and 71. Applicants, however, respectfully

disagree, based on evidence presented herein, that Johnson et al. teach the parsing/extracting functionality of the present invention.

Thus, prior to discussing other patentable features of each individual independent claim, the following remarks will discuss the common flaw in the Section 103(a) rejection of all the independent claims. The common flaw is that Johnson et al. do not teach the parsing parsing/extracting functionality of the present invention and there is no teaching, motivation, or suggestion to combine the cited references. Therefore, Applicants assert that this argument applies equally to all of the independent claims.

Johnson et al. provide an automated claims adjustment method for processing insurance claims in which administrative rules are used to determine the maximum allowable benefits in insurance claims (Johnson et al., abstract). Administrative rules are "derived specifically to maintain control over costs under Workers' Compensation Insurance benefits" (Johnson et al., column 1, lines 22-24). These administrative rules are available in written form in rulebooks and include a listing of all of the different types of treatment applicable to injury claims and the allowed payments for the treatments. Because there are hundreds of administrative rules, human claims processors are unable to remember which administrative rules are applicable to an injury claim. Therefore, these administrative rules are converted into computer-readable terms, for example a table of administrative rules, for use by a computer to replace the manual-human

process of applying the rules. In other words, the computer automatically applies the administrative rules in insurance claims by conducting a search of the applicable administrative rule, stored in a computer memory, and matches the applicable administrative rules to an injury claim (Johnson et al., column 2, lines 1-15). The administrative rules of Johnson et al. are used to identify exceptions to insurance claims, thereby reducing overpayment of insurance claims. The administrative rules are also used to determine if a provider is a qualified "professional" and which administrative rules apply to which specific treatment provided (Johnson et al., column 2, lines 24-26). Thus, Johnson et al. provides an insurance claim adjustment method.

In contrast, independent Claims 1, 21, 38, 40, 47, 49, 51, 62 and 71 provide a parsing/extracting functionality which parses billing data using "rules of conversion" or "a rules application process" to provide structural processing and conversion for the common document model for use by the bill presentment and payment system. The rules of conversion of the present invention allows a wide variety of biller data types and formats to be operated on or parsed to fit a common document or data model which allow for the storage and processing of both data and its attributes (see Applicants' Specification, page 26, lines 5-7). As disclosed by Applicants, using "rules of conversion" allows the data to be put into a form and format where it is "at least easier to generate and correlate the attributes for

various data in a form that can be used by the common document or data model" (see Applicants' Specification, page 26, lines 14-16).

As can be seen, the "rules of conversion" as recited in Claims 1, 21, 38, 40, 47, 49, 51, 62 and 71 and the "administrative rules" of Johnson et al. relate to two entirely different functions. First, the rules of the present invention directly affect the function of the parsing engine (i.e., converting and extracting data via the Internet), the common document model, and the incoming data in terms of its attributes and the data itself. The administrative rules of Johnson et al., on the other hand, help control costs by "recognizing exceptions" to an insurance claim and determining what administrative rules should be applied to the claimed treatment for the purpose of rejecting or adjusting the claimed amount. The administrative rules of Johnson et al. identify if a treatment is applicable to an injury claim. Thus, the administrative rules of Johnson et al. do not convert or extract relevant information from billing data received electronically from a biller via the Internet.

Second, Johnson et al. do not disclose a parsing/extracting functionality which is adapted to parse/extract billing data. That is, the administrative rules of Johnson et al. are not used to parsed data. The administrative rules of Johnson et al. reside in a database in which a search is conducted to determine the applicable administrative rule to an injury claim (Johnson et al., column 2, lines 11-13). The administrative rules of Johnson et al. are essentially a set of guidelines to

determine the pay out of an injury claim (to adjust claims). In contrast, the present invention uses the rules of conversion to parse or extract billing data received via the Internet.

Third, the claims adjustment method of Johnson et al. does not operate on a plurality of biller data types received via the Internet. Johnson et al. receive injury claims via the postal service in paper form and input the claims manually into a computer. Then, the inputted data is compared to the administrative rules to determine the applicable administrative rules. Thus, Johnson et al. do not operate on a plurality of biller data type. Furthermore, the Johnson et al. patent was issued years before the advent of the Internet. Therefore, Johnson et al. do not receive biller data via the Internet.

Fourth, Johnson et al. do not use rules of conversion to translate biller data into a common model document. In fact, if an abnormality is detected and the computer of Johnson et al. is unable to process the injury claim, the injury claim will be flagged and routed to a manual-human processor (Johnson et al., column 2, lines 17-19). In other words, if the inputted injury claim does not fit a certain template for searching for the applicable administrative rules, Johnson et al. will reject the injury claim for manual processing. As discussed earlier, the universality of the structure of the common model document of the present invention allows the billers using the present invention to maintain control over

their billing data and provides for a generic conversion process that is not confined to a particular industry, biller, or type of customer.

For the sake of clarity, the "rules conversion step" disclosed by Johnson et al. refers to converting administrative rules into "computable" terms (Johnson et al,. column 4, lines 32-33). For example, Johnson et al. use the "rules conversion step" to convert the Oregon Administrative Rules into computer codes (Johnson et al., column 4, lines 47-49). As can be seen, the "rules conversion step" of Johnson et al. do not parse biller data into relevant information for a common model document. Johnson et al. use the rules conversion step to denote the step of converting hardcopy, book rules into computer codes for a computer to automatically adjust claims. In contrast, the present invention uses rules of conversion to translate electronic biller data into an electronic common document model.

Based on the foregoing, Applicants respectfully submit that Johnson et al. do not cure the parsing/extracting functionality deficiency of Schutzer. Thus, independent Claims 1, 21, 38, 40, 47, 49, 51, 62 and 71 are not obvious under Schutzer in view of Johnson et al.

Applicants further submit that the cited references relate to different subject matter, and therefore, there is no motivation in either of the cited references to modify the teachings of Schutzer with the teachings of Johnson et al., to obtain the claimed invention of Claims 1, 21, 38, 40, 47, 49, 51, 62 and 71.

First, Johnson et al. is not germane either to the EBPP system disclosed by Schutzer or to the present invention. Johnson et al. relate to a method of processing insurance claims received via the postal service. Johnson et al. essentially function as a claims adjuster. Schutzer, on the other hand, provides for an electronic bill presentment and payment system via the Internet. Although an insurance claim may be referred to as a "bill," the method of Johnson et al. do not collect bills for the customer and present the bills to the customer. Thus, Applicants respectfully submit that the references cited by the Examiner relate to different types of systems, and therefore, there is no motivation in either of the cited references to modify the EBPP teachings of Schutzer et al. with the insurance claims adjustment teachings of Johnson et al, to obtain the claimed invention.

Second, there is no suggestion to select and combine the cited references. As is stated above, the two cited references relate to substantially different subject matters, and thus, there is no motivation to select Johnson et al. to cure the deficiencies of Schutzer. Moreover, Applicants cannot find any suggestion in either cited reference to combine the references. In a rejection based upon a combination of components selected from different references, "particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed." *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000).

What the Examiner did in this Office Action is to use the highly innovative and novel solution taught by the Applicants as a blueprint, with one reference as the main structural diagram, and the other two references for the elements present in the claims but missing from the primary reference. The proper analysis is whether there is something in one of the prior art references which are being combined which suggests the combination. In this Office Action, the Examiner failed to find such a teaching or suggestion supporting the combination. The Examiner stated that the combination of the cited references would have been obvious "because this would have facilitate determining the basic maximum allowable payment which is then modified by any modifying rules that are applicable" (see Office Action, February 28, 2003, for example, page 4, lines 8-9). "Determining the basic maximum allowable payment" is the objective of the invention of Johnson et al. "Determining the basic maximum allowable payment" is not a proper reason to suggest the combination of Johnson et al. with Schutzer because Schutzer has nothing to do with "maximum allowable payment." Schutzer is an electronic bill presentment and payment system; Schutzer does not determine the maximum allowable payment.

Thus, the Examiner's Section 103(a) rejection is an improper combination of prior art references, saying little more than that it was obvious to make the combinations because the combinations were obvious. Therefore, Applicants respectfully assert that the rejection under 35 U.S.C. §103(a) should be withdrawn.

In view of the distinctions noted and the advantages attendant thereto, it is respectfully submitted that Schutzer and Johnson et al., taken singly or combined, do not teach each and every aspect of the claimed invention of independent Claims 1, 21, 38, 40, 47, 49, 51, 62 and 71, either explicitly or impliedly. Therefore, it is submitted that independent Claims 1, 21, 38, 40, 47, 49, 51, 62 and 71 clearly distinguish over Schutzer and Johnson et al. and are patentable thereover.

Claims 2-11, 13 and 17 are dependent upon Claim 1 and are believed to be patentable with the parent Claim 1.

Claims 22-34 are dependent upon Claim 21 and are believed to be patentable with the parent Claim 21.

Claims 39 is dependent upon Claim 38 and is believed to be patentable with the parent Claim 38.

Claims 41-43 are dependent upon Claim 40 and are believed to be patentable with the parent Claim 40.

Claims 48 is dependent upon Claim 47 and is believed to be patentable with the parent Claim 47.

Claims 50 is dependent upon Claim 49 and is believed to be patentable with the parent Claim 49.

Claims 52-55 and 57-60 are dependent upon Claim 51 and are believed to be patentable with the parent Claim 51.

Claims 63-65 are dependent upon Claim 62 and are believed to be

patentable with the parent Claim 62.

Claims 72-81 are dependent upon Claim 71 and are believed to be patentable with the parent Claim 71.

Independent Claims 38, 40, 47, 49 and 71 further distinguish over Schutzer and Johnson et al. by reciting a parsing/extractor functionality using rules of conversion which is a rules application process allowing a user to generate a translator for parsing the billing data into a common document tree in which the common document tree contains data and attributes which are mapped into nodes which fit a common model document for storage.

The creation of a translator for parsing data and attributes into a form that can be stored in a common format storage model allows the present invention to efficiently present the bill to the consumer, query the stored data, control how it will be presented (e.g., brand building); and use the stored data as a customer service tool (e.g., help desk) (see Applicants' Specification, page 10, lines 3-7). In addition, not every biller data has the same information and data; each biller will have a subset of all data and attributes accommodated by the common document tree and parsing/extractor functionality. The parsing/extractor functionality provides a generic conversion process that is not confined to a particular industry, biller, or type of customer and accepts any subset of data from any biller. Therefore, billers retain autonomy on how they collect, group, display, and present their billing information.

Schutzer discloses that the bill service provider converts the bill, along with enclosures, to a standard bill definition language (see Schutzer column 14, lines 32-35). "The standard bill definition language is an extension of hypertext markup language/extended markup language that allows for combining templates with data and taking digital signatures" (see Schutzer, column 14, lines 35-38). In other words, Schutzer's standard definition format merely provides instructions for formatting the bills uniformly based on pre-determined templates. Therefore, as can be seen, Schutzer does not disclose a translator for parsing data into a common document tree with data and attributes.

Johnson et al. do not mention a translator and a common document tree either. The claims adjustment method of Johnson et al. merely receives information and uses the information to determine the maximum allowable payment to the provider using administrative rules. Johnson et al. do not "operate" on the biller data and do not parse the biller data into a common document tree with data and attributes mapped into nodes for a common model document.

In view of the distinctions noted and the advantages attendant thereto, it is respectfully submitted that Schutzer and Johnson et al., taken singly or combined, do not teach, either explicitly or impliedly, a parsing/extractor functionality that allows a user to generate a translator for parsing data into a common document tree that contains data and attributes which are mapped into nodes to fit a common model document for storage. Thus, Schutzer and Johnson et al. do not teach each

and every aspect of the claimed invention of independent Claims 38, 40, 47, 49 and 71. Therefore, Applicants respectfully assert that the Section 103(a) rejection of Claims 38, 40, 47, 49 and 71 should be withdrawn.

With regard to independent Claim 40, Claim 40 further distinguishes over Schutzer and Johnson et al. by reciting "a biller interface coupled to said database adapted to allow said plurality of billers to identify market segments of said bill payers according to market rules and information retrieved from said database." The Examiner cites Schutzer, *fig. 1-7, and column 14, line 26 to column 15, line 2* (see Office Action , February 28, 2003, page 8, line 1) for Claim 41 which has been renumbered to be Claim 40; however, the Schutzer drawings and text referred to by the Examiner do not disclose a biller interface as recited in Claim 40. In fact, there is no mention of the billers being able to identify market segments of bill payers in the Schutzer patent. Johnson et al. do not mention a biller interface as recited in Claim 40 either.

In view of the distinctions noted and the advantages attendant thereto, it is respectfully submitted that Schutzer and Johnson et al., taken singly or combined, do not teach a biller interface as recited in Claim 40, either explicitly or impliedly. Thus, Schutzer and Johnson et al. do not teach each and every aspect of the claimed invention of independent Claim 40. Therefore, Applicants respectfully traverse the Examiner's assertion of anticipation as to "biller interface" element of independent Claim 40.

Turning now to independent Claim 47, Claim 47 further distinguishes over Schutzer by reciting "an agent interface coupled to said database adapted to allow a plurality of agents having agency relationships with said plurality of billers to communicate with said bill payers regarding bills." Once again, the Examiner cites Schutzer, *figs. 1-7, column 14 line 26 to column 15, line 2,* which primarily disclose a bill service provider and not an agent interface as claimed. Therefore, Applicants respectfully traverse the Examiner's assertion of anticipation as to an "agent interface" as recited in Claim 47.

With respect to independent Claim 49, Claim 49 further distinguishes over Schutzer by reciting "bill payer interactivity functionality adapted to detect and respond to communications from said bill payers by at least retrieving from said database information corresponding to said bill payers and presenting said information to said bill payers in a form requested by said bill payers; and biller interactivity functionality adapted to detect and respond to communications from said plurality of billers by at least retrieving from said database information corresponding to said plurality of billers and presenting said information to said plurality of billers in a form requested by said plurality of billers." The Examiner again broadly cites Schutzer, *figs. 1-7, and column 14, line 26 to column 15, line 2*, which discloses that the "bill can be sent or "pushed" when available or held and sent when requested, i.e., "pulled" (see Schutzer, column 14, lines 51-53). The reference, however, does not disclose that bills can be presented to bill payers in a

form requested by the bill payers as claimed (emphasis added). In fact, Schutzer only "allows billers to personally customize and control the content and format of the bill presentment" (Schutzer, column 3, lines 8-9).

Moreover, Applicants stress the feature of Claim 49, "in a form requested by bill payers," which is not disclosed by Schutzer. As disclosed by Applicants, "customers can pay ... in a manner where each bill is presented to the customer in a way that is specially tailored to the customer with graphics, advertising, and other information that has been demographically proven to connect with that particular customer" (see Applicants' Specification, page 12, lines 13-16). Succinctly, the present invention allows both billers and payers to customize and control the presentation of bills whereas Schutzer only allows billers to customize bills. Therefore, Applicants respectfully traverse the Examiner's assertion of anticipation as to the "interactivity functionality" element recited in Claim 49.

With respect to the independent Claim 51, Claim 51 distinguishes over Schutzer and Johnson et al. by reciting elements that are similar to limitations recited in system Claim 1 as to the use of rules of conversion for the parsing functionality and the common document model. Claim 51 further distinguishes over Schutzer and Johnson et al. by reciting "a modularized input processing engine, said input processing engine adapted to preprocess billing data from a plurality of billers corresponding to a plurality of data types." The advantage of using a modularized processing engine is that this facilitates scalability and

expandability. For example, if a new form of biller data is encountered or must be dealt with for transformation into a form and format, the modularized input processing engine of Claim 51 allows for the processing of the new biller data in a modular way (see Applicants' Specification, page 25, lines 17-19). There may be separate engines for each new form of data so that the output of each preprocessing engine is ready for processing by a rule-based parsing engine. In other words, because the preprocessing of biller data is modularized, a new input processing engine can easily be integrated to handle new data types. In addition to the modularized input engine element, neither Schutzer nor Johnson et al. teach or suggest the parsing rules of conversion, allowing a user to generate a translator, and common document tree element which are claimed in Claim 51 in a manner similar to Claim 38. Therefore, Claim 51 is believed to be patentable for the reasons given above.

Independent Claim 62 distinguishes over Schutzer and Johnson et al. by reciting method steps that are similar to limitations recited in system Claim 1 as to the use of rules of conversion to extract information from billing data and the transformation of information into a common document model. Claim 62 further distinguishes over Schutzer and Johnson et al. by reciting the step of "modularizing the preprocessing of billing data from a plurality of billers corresponding to a plurality of data types." As previously discussed with respect to Claim 51, modularizing the preprocessing of biller data facilitates scalability

and expandability without disrupting the present system configuration. Therefore, Claim 62 is believed to be patentable over Schutzer and Johnson et al. for the reasons given above.

Independent Claim 71 distinguishes over Schutzer and Johnson et al. by reciting the use of rules of conversion for the parsing functionality and the common document model, in a manner similar to Claim 1; by reciting a parsing functionality with a rules application process, allowing a user to generate a translator for parsing the billing data into a common document tree that contains data and attributes that are mapped into nodes, in a manner similar to Claim 38; by reciting a bill payer interactivity functionality and a biller interactivity functionality, in a manner similar to Claim 49; and by reciting a modularized input processing engine, in a manner similar to Claim 51. Therefore, Claim 71 is believed to be patentable over Schutzer and Johnson et al. for the reasons given above.

In summary, Claims 1-11, 13, 17, 21-34, 38-43, 47-55, 57-60, 62-65 and 71-81 are believed to be allowable for the reasons given herein. Accordingly, these claims remain pending following entry of this Amendment, and are in condition for allowance at this time. As such, Applicants respectfully request entry of the present Amendment and reconsideration of the application, with an early and favorable decision being solicited. Should the Examiner believe that the

prosecution of the application could be expedited, the Examiner is requested to call Applicants' undersigned representative at the number listed below.

Respectfully submitted,
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